dunetpc - Feature #15258

Enable access to LArSoft services from Root command line

01/20/2017 09:58 AM - David Adams

Status:	Closed		**Start date:**	01/20/2017
Priority:	Normal		**Due date:**	
Assignee:	David Adams		**% Done:**	0%
Category:			**Estimated time:**	0.00 hour
Target version:				

Description

Following [#15162](#) which provided access to DUNE services from the Root command line, I would like to do the same for select LArSoft services.

History

#1 - 01/20/2017 10:12 AM - David Adams

I have added templates in dunetpc/dune/ArtSupport/ArtServiceProvider.h.

I also added dunetpc/dune/DuneServiceAccess/LarsoftServiceAccess that is intended to hold specializations for fully-specified providers. The header depends only on the provider classes. The compiled source holds the service dependencies.

At present, only ChannelStatusProvider is included.

These changes are committed to dunetpc tag f992d34ec34b476fb53be6cb2f640bdcdbebc056.

#2 - 01/24/2017 08:04 AM - David Adams

- Status changed from Assigned to Closed

Note that for LarSoft services, access is to the const service provider rather than the service itself. E.g. the syntax is

```
root> ArtServiceHelper& ash = ArtServiceHelper::load("standard_reco_dune35tdata.fcl");
root> const GeometryCore* pgeo = ArtServiceProvider<GeometryCore>();
root> pgeo->NTPC(0)
(unsigned int) 8
```

Access is now provided to ChannelStatusService and Geometry (provider is GeometryCore). I will add others as needed or requested.

Note the geometry access required a slight mod to larcoreobj ([#15262](#)). This and the changes here will presumably go into the release of dunetpc and larsoft. The current release is v06_21_00.

Changes here are in dunetpc tag 46ee0cab8da0de7cea8f2ff578916ed3a04cdf3a.

I close this report. Reopen or open new issues to request access to other service providers.